Last	STUDENT'S NAME	First	MI	SCHOOL NAME

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
(repeated for each letter column of the name grid)

TEACHER NAME

GRADE

3   4

○   ○

Female ○   Male ○

BIRTH DATE

Month	Day	Year
○ Jan	⓪ ⓪	⓪ ⓪
○ Feb	① ①	① ①
○ Mar	② ②	② ②
○ Apr	③ ③	③ ③
○ May	④ ④	④
○ Jun	⑤ ⑤	⑤
○ Jul	⑥ ⑥	⑥
○ Aug	⑦ ⑦	⑦
○ Sep	⑧ ⑧	⑧
○ Oct	⑨ ⑨	⑨
○ Nov		
○ Dec		

SOCIAL SECURITY NUMBER

⓪①②③④⑤⑥⑦⑧⑨ (9 columns)

DISTRICT STUDENT ID NUMBER

⓪①②③④⑤⑥⑦⑧⑨ (9 columns)

ETHNICITY
Fill in only one.

○ Alaska Native
○ American Indian
○ Asian-Pacific Islander
○ Black, not Hispanic
○ Hispanic
○ White

Alaska

Comprehensive System of Student Assessment

Alaska Department of Education & Early Development

Benchmark 1
Mathematics Practice Test

CTB McGraw-Hill

Mathematics

Sample A

John has 13 red balloons and 10 blue balloons.
How many balloons does he have in all?

Ⓐ 13

Ⓑ 14

Ⓒ 23

Ⓓ 24

Go On

Sample B

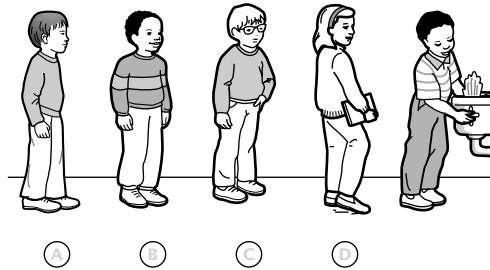Use your pattern blocks to help you solve this problem.

Green

Red
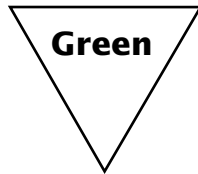
How many green triangles does it take to just cover the red block? _____

Draw on the red block below to show how you got your answer.

Red

STOP

Page 4

1   Tim is standing in line at the drinking fountain. He is the second student after the girl in the white sweater. Which of the students shown below is Tim?

A   B   C   D

2   Sam and his friends are making toy bears. They will glue 2 eyes on each of the bears shown below.
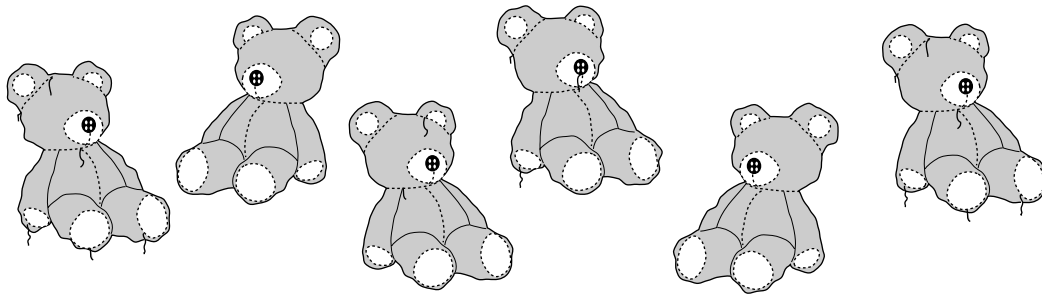
How many eyes will they need for all the bears?

   A   6

   B   8

   C   10

   D   12

Go On

3 Suzie put the coins shown below in her piggy bank.
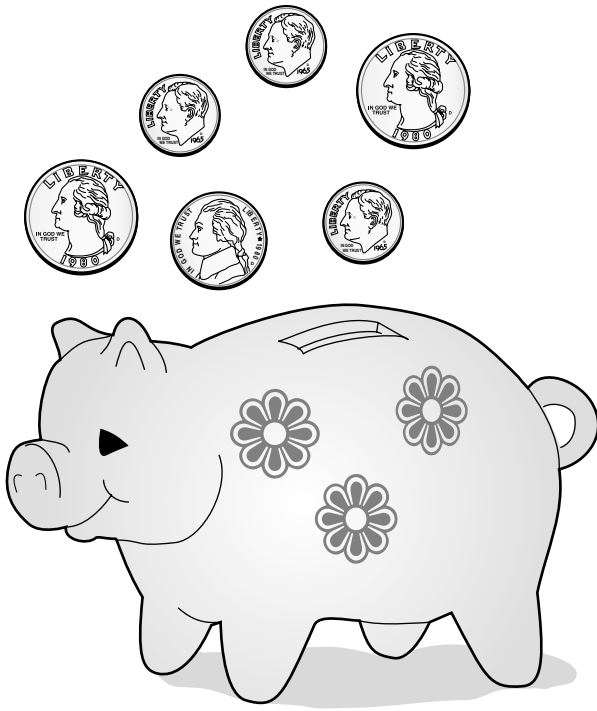
Which of these describes the coins?

Ⓐ 3 dimes, 2 nickels, 1 penny

Ⓑ 1 quarter, 2 dimes, 3 nickels

Ⓒ 2 quarters, 3 nickels, 1 penny

Ⓓ 2 quarters, 3 dimes, 1 nickel

4 Look at the pattern that Meg has created on her number chart below.

1	2		4	5
	7	8		10
11		13	14	
16	17		19	20
	22	23		25

What rule did Meg use to create this pattern?

Ⓐ Shade in all even numbers.

Ⓑ Shade in all odd numbers.

Ⓒ Shade in numbers when counting by 3's.

Ⓓ Shade in numbers when counting by 4's.

5 Ted is using small tiles to make the patterns shown below.
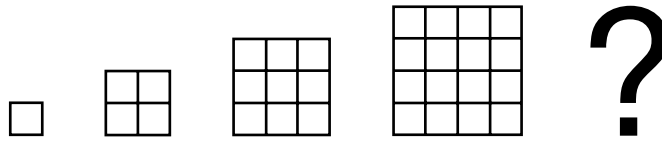
How many small tiles will Ted need to make the next large square in the pattern?

Answer: _____ **small tiles**

On the lines below, explain in words how you found the number of small tiles Ted will need.
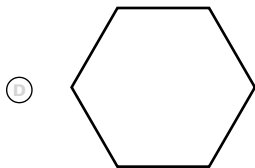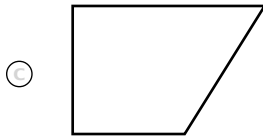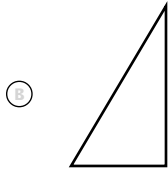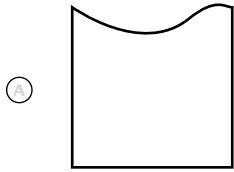
_____

_____

_____

6 Carla drew a shape on paper. She wrote the 2 sentences below about the shape.

It has 3 sides.
It has 3 angles.

Which of these shapes did Carla draw?

○ rectangle

○ triangle

○ square

○ circle

Go On

7 Which figure below has at least one line of symmetry?

Ⓐ

Ⓑ

Ⓒ

Ⓓ

**8** Scott will toss one coin 20 times. Which of these sentences below will always be true?

Ⓐ The coin will land on heads or tails.

Ⓑ The coin is certain to land on heads all 20 times.

Ⓒ The coin is certain to land on tails all 20 times.

Ⓓ The coin will land on heads exactly once.

9 Maria went to the beach and collected 4 different types of seashells.
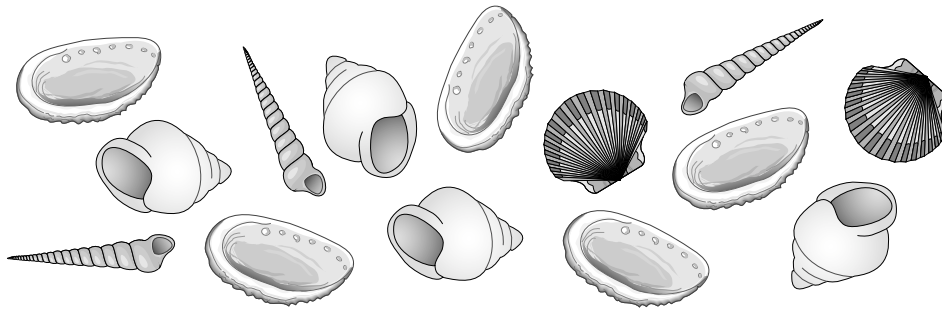
Complete the bar graph below to show the number of seashells Maria collected. The first one has been done for you.

SHELLS AT THE BEACH

Number of Shells
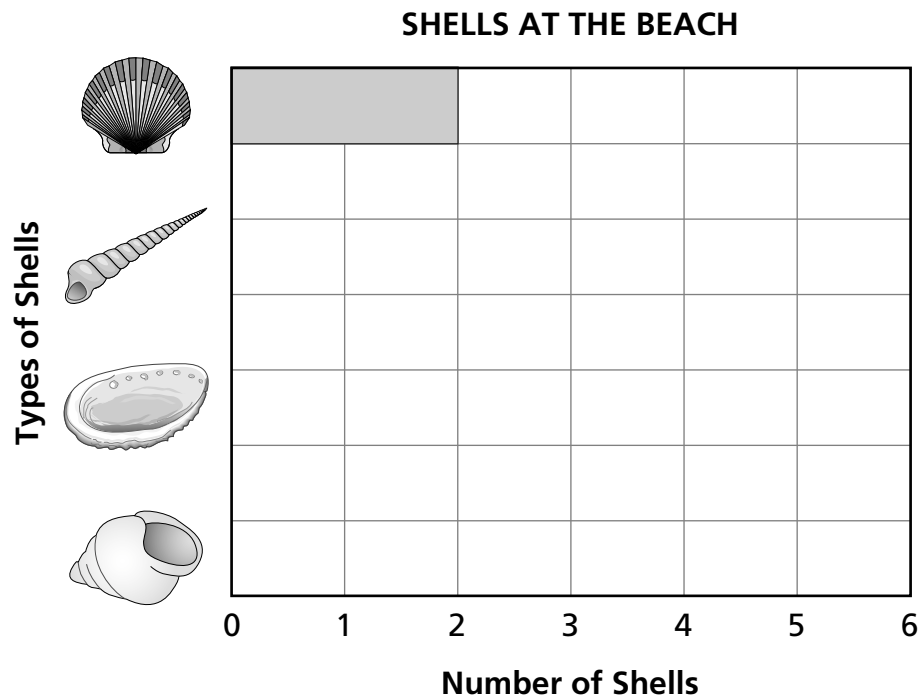
When Maria got home she found that *all* of her shells like the one shown below had broken.

Using the graph, write how many *unbroken* shells Maria had left.

Answer: _____ **unbroken shells**

Go On

Page 9

10 Look at the number pattern in the box below.

$$89, 85, 81, 77, \underline{\quad\quad}$$

Which number comes next in the pattern?
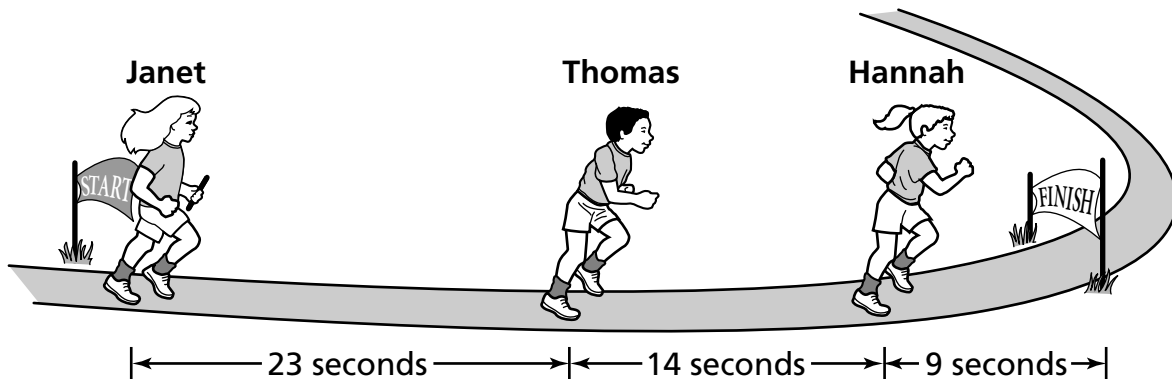
Ⓐ 72

Ⓑ 73

Ⓒ 74

Ⓓ 75

11 Basketball practice starts in the afternoon, after school.
Which of these could be the time basketball practice starts?

Ⓐ 12:00 A.M.

Ⓑ   7:30 A.M.

Ⓒ 10:00 A.M.

Ⓓ   3:30 P.M.
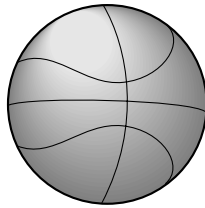
12 Janet, Thomas, and Hannah each ran one part of a relay race. The time it took them to run each part of the race is shown below.

Janet **Thomas** **Hannah**
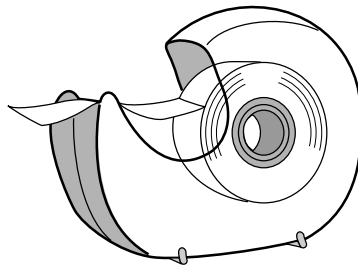
|← 23 seconds →|← 14 seconds →|← 9 seconds →|

How many seconds did it take Janet, Thomas, and Hannah to run the race from start to finish?

- Ⓐ 36
- Ⓑ 37
- Ⓒ 46
- Ⓓ 47

13 Sandy's mother uses strips of tape to hang Sandy's pictures so they will stick to the wall. It takes 4 strips of tape to hang one picture. How many strips of tape will Sandy's mother need to hang 6 pictures?

- Ⓐ 10
- Ⓑ 18
- Ⓒ 24
- Ⓓ 30

Go On

14 Eric's class is playing a game. Each student has a bag of treats filled with popcorn, pretzels, and raisins. The table below shows how many points *each* treat is worth.

1 popcorn		=	1 point
1 pretzel		=	10 points
1 raisin		=	20 points

This is Eric's bag of treats.

How many points does Eric have?

Ⓐ 44

Ⓑ 54

Ⓒ 64

Ⓓ 74

15 Cindy wants to buy some balloons for a party. Each balloon costs 5 cents. The money Cindy has to spend is shown below.

How many balloons can Cindy buy?

Answer: _____ **balloons**

On the lines below, explain in words how you found your answer.

_____

_____

_____

16 Mr. Field, the school principal, lost four pages from his calendar.
Which of these shows the missing pages in monthly order?

A.

| June | August | October | December |
| S M T W T F S | S M T W T F S | S M T W T F S | S M T W T F S |

B.

| December | June | October | August |
| S M T W T F S | S M T W T F S | S M T W T F S | S M T W T F S |

C.

| October | December | August | June |
| S M T W T F S | S M T W T F S | S M T W T F S | S M T W T F S |

D.

| August | December | June | October |
| S M T W T F S | S M T W T F S | S M T W T F S | S M T W T F S |

17 Kelly is building towers using white and gray blocks.
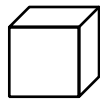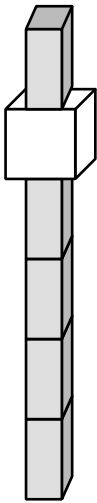
white block   gray block
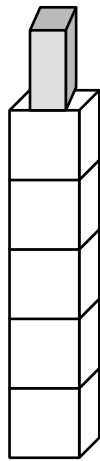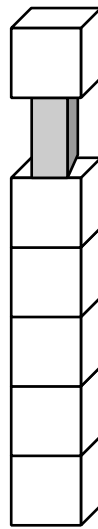
Which of these shows a tower in which $\frac{1}{6}$ of the blocks are white?

Ⓐ   Ⓑ   Ⓒ   Ⓓ

18 Donnie lit a candle. It looked like this.

After he blew out the candle, it looked like this.

What fraction of the candle was used?

Ⓐ $\frac{1}{5}$

Ⓑ $\frac{2}{5}$

Ⓒ $\frac{3}{5}$

Ⓓ $\frac{4}{5}$

STOP

KEY FOR MULTIPLE-CHOICE ITEMS

Sample A: **C**

1. **B**

2. **D**

3. **D**

4. **C**

6. **B**

7. **D**

8. **A**

10. **B**

11. **D**

12. **C**

13. **C**

14. **D**
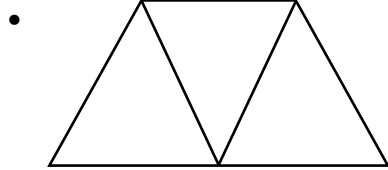
16. **A**

17. **A**

18. **C**

CONSTRUCTED-RESPONSE QUESTIONS:

Sample B

Complete and Correct Response

- 3 green triangles

AND

-

2 Score Points

- 1 point for correct number of triangles

- 1 point for correct drawing

Item 5

Complete and Correct Response

• 25 small tiles

AND

• I added 5 tiles to the fourth column of the fourth large square. I added 4 tiles to the bottom row of the fourth large square. Then, I counted all the tiles.

OR

• I added 3 tiles to the single tile to make the second large square. To make the third large square, I added 5 more tiles. To make the fourth large square, I added 7 more tiles. To make the fifth large square, I added 9 more tiles because 9 is the next odd number. Then, I counted all the tiles in the fifth large square.
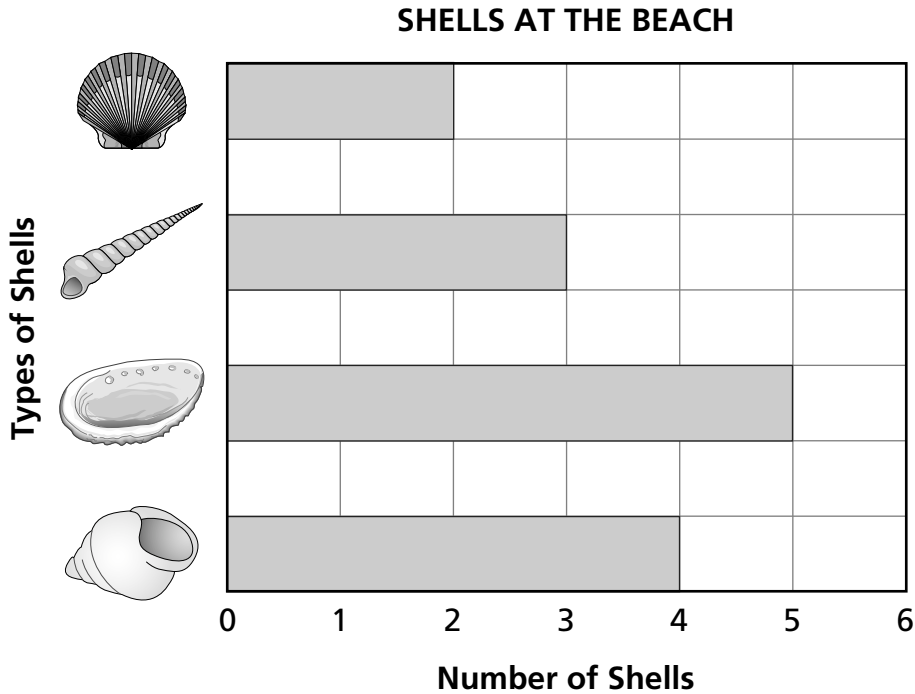
OR

• Other valid explanation

2 Score Points

• 1 point for correct number of small tiles in fifth square

• 1 point for valid explanation

Item 9

Complete and Correct Response

-

SHELLS AT THE BEACH

AND

- 11 unbroken shells

4 Score Points

- One point each for every correct bar that represents the respective shell. Note: The top bar was filled out in the test book.

- 1 point for correct number of unbroken shells

Item 15

Complete and Correct Response

• 12 balloons

AND

• I divided 60 by 5 to get 12 balloons.

OR

• The nickel will buy 1 balloon. Each dime will buy 2 balloons. There are 3 dimes, so Cindy can buy 6 balloons with the dimes. The quarter will buy 5 balloons. 1 + 6 + 5 = 12 balloons.

OR

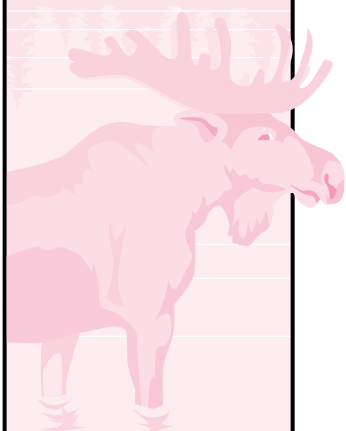• Other valid explanation

2 Score Points

• 1 point for correct answer of 12 balloons

• 1 point for valid explanation

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Benchmark 1
Mathematics Practice Test